

dividing a display screen into n^2 areas; and

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displaying the images and the other information data such that: (i) when $n^2 < p$, n^2 of the p images and other information data are displayed; and (ii) when $n^2 > p$, the p images and other information data are displayed starting from an upper-most, left-most one of the n^2 areas, and $(n^2 - p)$ blank images are displayed after the p images and other information data.

REMARKS

Claims 1-5, 7, 9-11, 15-22, 24, 26-28, 32-41, 43, 45-47, 51-56, 58, 60-62, 66 and 67 are pending. By this Amendment, claims 1-4, 7, 9-11, 15, 17-21, 24, 26-28, 32, 35, 37-40, 43, 45-47, 51-56, 58, 60-62, 66 and 67 are amended, and claims 6, 8, 12-14, 23, 25, 29-31, 42, 44, 48-50, 57, 59 and 63-65 are canceled. The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

The CPA Transmittal filed on October 23 requested that prosecution of this application be suspended for three month. Upon entry of this Preliminary Amendment, Applicants request that prosecution be resumed. The above amendments and following the remarks are responsive to the April 24, 2001 Office Action.

The Office Action did not reference the Information Disclosure Statement filed on November 22, 1998, which forwarded a copy of one U.S. Patent. The Information Disclosure Statement attached hereto re-submits this patent (USP 5,648,760). The Examiner is requested to consider this reference and return an initialed PTO-1449 with the next Patent Office Communication.

Claims 1-7, 12-24, 29-43, 48-58 and 63-67 stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,414,811 to Parulski et al. in view of U.S. Patent No. 5,539,426 to Nishikawa et al. In addition, dependent claims 8-11, 25-28, 44-47 and 59-62 stand rejected under 35 U.S.C. §103(a) over the above references and further in view of U.S. Patent No. 5,838,317 to Bolnick et al. These rejections are respectfully traversed. Applicants

respectfully submit that all pending claims are patentable over the applied references for at least the reasons set forth below.

None of the applied references discloses or suggests an arrangement in which, *inter alia*, a display screen is divided into n^2 areas, one or more of the images are displayed as reduced images that are smaller than $1/n$ height by $1/n$ width in a corresponding one of the areas of the screen, and a symbol representative of the other information data (e.g., sound data as recited in some of the dependent claims) is displayed in a corresponding one of the divided areas of the display screen as recited in independent claim 1, 19, 37 and 53. None of the applied references discloses or suggests displaying reduced images (of images that are stored in memory) along with a symbol representative of other information data (such as, for example, sound data) stored in memory. Furthermore, the references do not disclose or suggest the manner in which the reduced images and symbol are displayed, as set forth above, in independent claims 1, 19, 37 and 53. In particular, the references do not disclose or suggest displaying the reduced images and the symbols in areas (corresponding ones of the n^2 areas) having the same size, which facilitates maintenance of the aspect ratio of the displayed reduced images.

Parulski et al. relates to an apparatus that displays multiple images simultaneously so that those images can be compared to each other. See, for example, col. 2, lines 12-37 and col. 4, lines 44-53 of Parulski et al. As recognized in the Office Action, Parulski et al. provides no teaching regarding the display of any symbol representative of information data other than stored images. This is not surprising because, as noted above, the object of Parulski et al. is to simultaneously display a plurality of images so that those images can be compared to each other. There is no reason to modify Parulski et al. to display a symbol representative of information data other than images.

Nishikawa et al. suffers from the same deficiencies as Parulski et al. noted above. That is, Nishikawa et al. is only concerned with the display of images. In particular, Parulski et al. relates to displaying images for medical diagnosis. See, for example, col. 2, lines 46-50, col. 3, lines 24-26 and col. 4, line 64 - col. 5, line 5. Again, there is no reason to modify Nishikawa et al. to display a symbol representative of information data other than images.

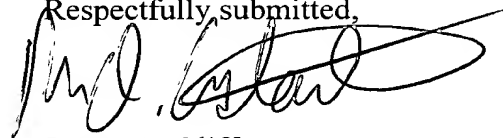
Bolnick et al., even when combined with Parulski et al. and/or Nishikawa et al., does not disclose or suggest the combination of features recited in independent claims 1, 19, 37 and 53. Bolnick et al. relates to displaying graphical representations in a GUI. See, for example, col. 2, lines 11-15. Bolnick et al. does not disclose or suggest displaying reduced images of images that are stored in memory, or an arrangement in which such reduced images are displayed along with symbols that represent information data other than images. Applicants respectfully submit that one having ordinary skilled in the art would not arrive at the combination of features/steps recited in independent claims 1, 19, 37 and 53 from reading Parulski et al., Nishikawa et al. and Bolnick et al. without using impermissible hindsight.

The combination of features/steps recited in independent claims 18, 35, 52 and 57 also are not disclosed or suggested by the applied references. In particular, none of the references discloses or suggest an arrangement in which blank images are displayed when $p < n^2$.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



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Attachments:
Appendix
Information Disclosure Statement

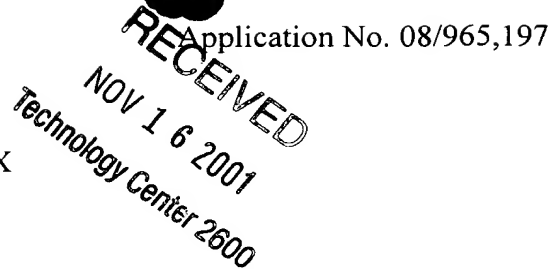
Date: November 14, 2001

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APPENDIX



Changes to Claims:

Claims 6, 8, 12-14, 23, 25, 29-31, 42, 44, 48-50, 57, 59 and 63-65 are canceled.

The following are marked-up versions of the amended claims:

1. (Amended) An information processing apparatus comprising:

storage means for storing a plurality of images and other information data;

~~designation means for designating one or more of the images stored in the~~

~~storage means;~~

dividing means for dividing a display screen into a plurality of displayⁿ areas
~~according to the number of images designated by the designation means; and~~

display control means for displaying each of the one or more of the images
~~designated by the designation means~~ as reduced images that are smaller than 1/n height by 1/n
width in a corresponding one of the display areas of the screen divided by the dividing means,
and displaying a symbol representative of the other information data in a corresponding one of
the areas of the screen divided by the dividing means.
2. (Amended) The apparatus of claim 1, wherein the ~~display control means~~
~~displays the designated images as reduced images~~ other information data is sound data.
3. (Amended) The apparatus of claim 1, wherein the dividing means divides the
screen so that an aspect ratio of the divided display areas is equal to an aspect ratio of the
~~designated~~ displayed images.
4. (Amended) The apparatus of claim 1, wherein the ~~dividing means divides the~~
~~screen into n² areas when the number of the designated~~ displayed images is greater than (n-1)²
and equal to or less than n².

7. (Amended) The apparatus of claim 1, further comprising selection means for selecting one of the images displayed in the ~~divided display~~^{n²} areas, and wherein the display control means displays the selected image so as to occupy an entire area of the screen.

9. (Amended) The apparatus of claim 8~~2~~, wherein when images that ~~have been designated by the designation means~~are displayed include sound data associated therewith, the display control means displays the ~~designated~~ images in the corresponding display areas of the screen together with athe symbol indicating the existence of the sound data associated with the images.

10. (Amended) The apparatus of claim 8~~2~~, wherein when sound data ~~that has been designated by the designation means~~ does not include an image associated therewith, the display control means displays athe symbol representative of the ~~designated~~ sound data in the corresponding display area.

11. (Amended) The apparatus of claim 8~~2~~, further comprising:
selection means for selecting one of the images displayed in the divided display areas;
sound playback means for playing back the sound data;
wherein when the image selected by the selection means has sound data associated therewith, the display control means displays the selected image so as to occupy the entire area of the screen, and the sound playback means reproduces the sound data associated therewith.

15. (Amended) The apparatus of claim 1, further comprising line-drawing input means for inputting line drawings, wherein when the displayed images ~~designated by the designation means~~ have corresponding line-drawings input through the line-drawing input means, the display control means displays the ~~designated~~ images and the corresponding line-drawings in the screen with the line-drawings superimposed on the corresponding images.

17. (Amended) The apparatus of claim 1, wherein the apparatus is an electronic camera that further comprises input means for inputting the images and the other information data into the storage means.

18. (Amended) An information processing apparatus comprising:
storage means for storing a plurality of images and other information data, the total number of the images and the other information data is p ;
~~designation means for designating one or more images stored in the storage~~
~~means~~ dividing means for dividing a display screen into n^2 areas; and
display control means for ~~controlling a display size of the images according to the number of the images designated by the designation means~~ displaying the images and the other information data such that: (i) when $n^2 < p$, n^2 of the p images and other information data are displayed; and (ii) when $n^2 > p$, the p images and other information data are displayed starting from an upper-most, left-most one of the n^2 areas, and $(n^2 - p)$ blank images are displayed after the p images and other information data.-

19. (Amended) An information processing apparatus comprising:
a memory that stores a plurality of images and other information data; and
~~_____ a designation device that designates one or more of the images stored in the~~
~~memory; and~~
a controller, coupled to the memory, ~~and to the designation device to divide and~~
~~that divides~~ a display screen into n^2 a plurality of display areas according to the number of
~~images designated by the designation device and that displays to display each of the one or more~~
~~of the images as reduced images that are smaller than $1/n$ height by $1/n$ width designated by the~~
~~designation device in a corresponding one of the display- n^2 areas of the screen, and that displays~~
a symbol representative of the other information data in a corresponding one of the n^2 areas of
the screen.

20. (Amended) The apparatus of claim 19, wherein the controller displays the ~~designated images as reduced images~~ other information data is sound data.

21. (Amended) The apparatus of claim 19, wherein the controller divides the screen into n^2 areas when the number of the designated displayed images is greater than $(n-1)^2$ and equal to or less than n^2 .

24. (Amended) The apparatus of claim 19, further comprising a selector that selects one of the images displayed in the n^2 ~~divided display~~ areas, and wherein the controller displays the selected image so as to occupy an entire area of the screen.

26. (Amended) The apparatus of claim ~~25~~20, wherein when images that are displayed ~~have been designated by the designation device~~ include sound data associated therewith, the controller displays the ~~designated~~ images in the corresponding display areas of the screen together with athe symbol indicating the existence of the sound data associated with the images.

27. (Amended) The apparatus of claim ~~25~~20, wherein when sound data ~~that has been designated by the designation device~~ does not include an image associated therewith, the controller displays athe symbol representative of the ~~designated~~ sound data in the corresponding display area.

28. (Amended) The apparatus of claim ~~25~~20, further comprising:
a speaker that plays back the sound data;
a selector that selects one of the images displayed in the n^2 ~~divided display~~ areas;

wherein when the image selected by the selector has sound data associated therewith, the controller displays the selected image so as to occupy the entire area of the screen, and the speaker plays back the sound data associated therewith.

32. (Amended) The apparatus of claim 19, further comprising a touch tablet coupled to the controller to input line drawings, wherein when the displayed images designated by the designation device have corresponding line-drawings input through the touch tablet, the controller displays the designated images and the corresponding line-drawings in the screen with the line-drawings superimposed on the corresponding images.

35. (Amended) An information processing apparatus comprising:
a memory that stores a plurality of images and other information data, the total number of the images and the other information data is p; and
~~_____ a designation device that designates one or more images stored in the memory;~~
and
a controller, coupled to the memory, ~~and to the designation device to control a display size of the images according to the number of the images designated by the designation device~~ that divides a display screen into n^2 areas, and that displays the images and the other information data such that: (i) when $n^2 < p$, n^2 of the p images and other information data are displayed; and (ii) when $n^2 > p$, the p images and other information data are displayed starting from an upper-most, left-most one of the n^2 areas, and $(n^2 - p)$ blank images are displayed after the p images and other information data.

37. (Amended) A method of controlling an information processing apparatus that controls the display of information relating to a plurality of images and other information data stored in a memory, comprising the steps of:
~~_____ designating one or more images stored in a memory;~~
dividing a display screen into ~~a plurality of display n^2 areas according to the number of designated images; and~~
displaying each of ~~the one or more designated of the images as reduced images~~ that are smaller than $1/n$ height by $1/n$ width in a corresponding one of the display areas of the

divided screen, and displaying a symbol representative of the other information data in a corresponding one of the areas of the divided screen.

38. (Amended) The method of claim 37, wherein the ~~displaying step displays the designated images as reduced images~~ other information data is sound data.

39. (Amended) The method of claim 37, wherein the dividing step divides the screen so that an aspect ratio of the ~~divided display~~ n^2 areas is equal to an aspect ratio of the ~~designated displayed~~ images.

40. (Amended) The method of claim 37, wherein the ~~dividing step divides the screen into n^2 areas when the number of the designated displayed~~ images is greater than $(n-1)^2$ and equal to or less than n^2 .

43. (Amended) The method of claim 37, further comprising the steps of:
selecting one of the images displayed in the ~~n^2 divided display~~ areas; and
displaying the selected image so as to occupy an entire area of the screen.

45. (Amended) The method of claim 4438, wherein when images that ~~have been designated~~ are displayed include sound data associated therewith, the displaying step displays the ~~designated images in the corresponding display areas of the screen together with a~~ the symbol indicating the existence of the sound data associated with the images.

46. (Amended) The method of claim 4438, wherein when sound data ~~that has been designated~~ does not include an image associated therewith, the displaying step displays a the symbol representative of the ~~designated sound~~ data in the corresponding display area.

47. (Amended) The method of claim 4438, further comprising the steps of:
selecting one of the images displayed in the ~~divided display~~ n^2 areas; and
when the selected image has sound data associated therewith, the displaying step displays the selected image so as to occupy the entire area of the screen, and the sound data associated therewith is reproduced.

51. (Amended) The method of claim 37, further comprising the steps of:
inputting line drawings;
wherein when the ~~designated~~displayed images have corresponding line-drawings, the displaying step displays the ~~designated~~images and the corresponding line-drawings in the screen with the line-drawings superimposed on the corresponding images.

52. (Amended) A method of controlling an information processing apparatus, comprising the steps of:

~~designating~~retrieving one or more of a plurality of images and other
information data stored in a memory, the total number of the retrieved images and other
information data is p; and
dividing a display screen into n^2 areas; and
displaying the images and the other information data such that: (i) when $n^2 < p$,
 n^2 of the p images and other information data are displayed; and (ii) when $n^2 > p$, the p images
and other information data are displayed starting from an upper-most, left-most one of the n^2
areas, and $(n^2 - p)$ blank images are displayed after the p images and other information
data~~controlling a display size of the images according to the number of the images that are~~
~~designated.~~

53. (Amended) A recording medium that stores a computer-readable control program having instructions that are executable by an information processing apparatus, that
controls the display of information relating to a plurality of images and other information data
stored in a memory, to perform the steps of:

~~receiving a designation of one or more images stored in a memory for~~
~~display in a display screen;~~

~~dividing the a display screen into a plurality of display n^2 areas-~~
~~corresponding to the number of designated images; and~~

displaying each of the ~~designated~~ one or more of the images as reduced images that are smaller than $1/n$ height by $1/n$ width in a corresponding one of the divided areas of the display screen, and displaying a symbol representative of the other information data in a corresponding one of the divided areas of the display screen.

54. (Amended) The recording medium of claim 53, wherein the ~~displaying step~~ displays the ~~designated images as reduced images~~ other information data is sound data.

55. (Amended) The recording medium of claim 53, wherein the dividing step divides the screen so that an aspect ratio of the ~~divided display~~ ^{n^2} -areas is equal to an aspect ratio of the ~~designated~~ displayed images.

56. (Amended) The recording medium of claim 53, wherein the ~~dividing step~~ divides the screen into n^2 -areas when the number of the ~~designated~~ displayed images is greater than $(n-1)^2$ and equal to or less than n^2 .

58. (Amended) The recording medium of claim 53, wherein the control program further comprises instructions to perform the steps of:

allowing for the selection of one of the images displayed in the ~~divided~~ ^{n^2} ~~display~~ areas; and

displaying the selected image so as to occupy an entire area of the screen.

60. (Amended) The recording medium of claim ~~59~~⁵⁴, wherein when images that have been ~~designated~~ displayed include sound data associated therewith, the displaying step displays the ~~designated~~ images in the corresponding ~~display~~ areas of the screen together with a the symbol indicating the existence of the sound data associated with the images.

61. (Amended) The recording medium of claim ~~59~~⁵⁴, wherein when sound data that has been ~~designated~~ does not include an image associated therewith, the displaying step displays a the symbol representative of the ~~designated~~ sound data in the corresponding display area.

62. (Amended) The recording medium of claim ~~59~~54, wherein the control program further includes instructions to perform the steps of:

allowing for the selection of one of the images displayed in the ~~divided-~~
~~display~~n² areas; and

when the selected image has sound data associated therewith, the displaying step displays the selected image so as to occupy the entire area of the screen, and the sound data associated therewith is reproduced.

66. (Amended) The recording medium of claim 53, wherein the control program further includes instructions to perform the steps of:

inputting line drawings;

wherein when the ~~designated~~displayed images have corresponding line-drawings, the displaying step displays the ~~designated~~ images and the corresponding line-drawings in the screen with the line-drawings superimposed on the corresponding images.

67. (Amended) A recording medium that stores a computer-readable control program having instructions that are executable by an information processing apparatus, that controls the display of information relating to a plurality of images and other information data stored in a memory, to perform the steps of:

receiving a designation of~~retrieving~~ one or more of the images stored in a memory and the other information data, the total number of the retrieved images and other information data is p ; and

dividing a display screen into n^2 areas; and

displaying the images and the other information data such that: (i) when $n^2 < p$, n^2 of the p images and other information data are displayed; and (ii) when $n^2 > p$, the p images and other information data are displayed starting from an upper-most, left-most one of the n^2 areas, and $(n^2 - p)$ blank images are displayed after the p images and other information

datacontrolling a display size of the images according to the number of the images that are designated.